

Advanced Computer Applications

Primary Career Cluster:	Business, Management & Administration
Consultant:	Joy Smith, (615) 532-6248, <u>Joy.Smith@tn.gov</u>
Course Code(s):	5904
Recommended Prerequisite(s):	Computer Applications (5891/3638/3721)
Credit:	1-2* (*Students must choose a minimum of two areas of specialization to prepare for industry certification.)
Grade Level:	10-12
Aligned Student Organization(s):	DECA: www.decatn.org FBLA: www.fblatn.org Sarah Williams, (615) 532-2829, <u>Sarah.G.Williams@tn.gov</u>
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

Course Description

This is a capstone course in which students will learn necessary skills in problem solving using current and emerging integrated technology to include a variety of input technologies in the production of professional quality business documents and presentations. The course focuses on student choice, accountability and performance. Students increase their employability by working toward the attainment of high-level skills in the areas of integrated software applications, communication skills, ethical issues, human relations, leadership, self-management, and workplace management. Students may choose areas of specialization and achieve industry certification in areas such as word processing, spreadsheet applications, multimedia presentations, schedule and contact management, etc. This course may articulate to post–secondary education. (This course requires a computerized workstation and supportive software for required applications.)

Course Standards

Standard 1.0

The student will develop and apply concepts related to human relations, safety, career development, communications, and leadership skills for a global workplace.

The student will:

- 1.1 Demonstrate sensitivity to personal, societal, corporate, and governmental responsibility to community and global issues.
- 1.2 Demonstrate the interpersonal, teamwork, and leadership skills needed to function in diverse business settings, including the global marketplace.
- 1.3 Communicate effectively as writers, listeners, and speakers in diverse social and business settings.
- 1.4 Apply the critical-thinking and soft skills needed to function in students' multiple roles as citizens, consumers, workers, managers, business owners, and directors of their own futures.
- 1.5 Analyze and follow policies for managing legal and ethical issues in organizations and in a technology-based society.
- 1.6 Investigate the life-long learning skills that foster flexible career paths and confidence in adapting to a workplace that demands constant retooling.
- 1.7 Assess personal skills, abilities, aptitudes, and personal strengths and weaknesses as they relate to career exploration and apply knowledge gained from individual assessment to research and develop an individual career plan.
- 1.8 Examine the goals and principles of Future Business Leaders of America.
- 1.9 Investigate online and office safety procedures and pass a written safety examination with 100% accuracy.
- 1.10 Demonstrate parliamentary procedure through office staff/chapter organizational meetings.
- 1.11 Apply appropriate typography concepts to industry documents.

Sample Performance Task

Design and produce a team project on legal and ethical issues that includes issues and penalties for plagiarism, copied text that does not require permission, and copied data that requires permission and the process used in obtaining permission. Obtain formal permission for use of quotations, art form, design, music, and photographs. Develop and present a total team project utilizing various technology components and appropriate typography concepts.

Standard 2.0 - Input Technologies

The student will enter and manipulate information appropriately by using various input technologies.

The student will:

- 2.1 Choose the appropriate input technology from the ones available to optimize performance.
- 2.2 Select and apply various forms of input technologies to maximize productivity and optimize performance.

Sample Performance Task

Design and produce an automated presentation that showcases CTE programs of study or specific courses for the student's school. The finished product should be Web-ready with voice-over information and should include both scanned and digital camera images.



Standard 3.0 - Productivity Software

The student will identify, evaluate, select, use, and customize a variety of productivity software applications (e.g., word processing, spreadsheet, presentation, and personal information management applications) to diagnose and complete tasks, create professional quality products, and solve problems.

The student will:

- 3.1 Research, using a variety of tools (e.g., help menus, Internet resources, and tech support), and independently apply the information found to correctly use advanced software features business documents that integrate multiple software applications.
- 3.2 Utilize the collaborative features of productivity tools software to accomplish organizational tasks.
- 3.3 Select and use appropriate advanced features of productivity software.
- 3.4 Evaluate the effectiveness of a variety of productivity software programs and features to solve specific problems.
- 3.5 Obtain industry certification(s) for productivity software applications as needed for a chosen career path.
- 3.6 Diagnose and solve problems encountered while using productivity software.
- 3.7 Identify, evaluate, and select productivity software specific to the needs of organizations and/or industries.
- 3.8 Demonstrate an understanding of the life cycle of software and analyze cost-benefit as it relates to the selection and timing of software acquisition.
- 3.9 Create professional quality reports and/or presentations that integrate information and components produced in a variety of productivity software applications.
- 3.10 Key a minimum of 50 GWAM on a three-minute timed writing with a maximum of three errors.

Sample Performance Task

Integration Project: Using typography specifications and layout and design principles, the student will design original graphics for a letterhead, envelope, and newsletter masthead for an organization. Graphics must include spot color, text rotation, and cannot be copied from any other source.

Standard 4.0 - Information Retrieval, Analysis, and Synthesis

The student will gather, analyze, evaluate, utilize, and cite information from information technology sources.

The student will:

- 4.1 Analyze and evaluate the effectiveness and reliability of online information resources.
- 4.2 Retrieve, organize, analyze, and synthesize information from a variety of data sources to formulate decisions.
- 4.3 Present analyzed and synthesized information in a variety of meaningful formats that employ business-appropriate layout, design, and citation.



Sample Performance Task

Use the Internet to research ethics in the workplace and develop a code of ethics.

Standard 5.0 - Interactive Multimedia

The student will use multimedia software to create media rich projects.

The student will:

- 5.1 Evaluate, select, and apply a variety of multimedia software appropriate for specific tasks.
- 5.2 Create projects rich in multimedia components.

Sample Performance Task

Design and produce an interactive multimedia project on legal and ethical issues that includes issues and penalties for plagiarism, copied data acquired with permission and the process used in obtaining the permission. Obtain formal permission, art form, design, music, and photographs. Develop and present a total team interactive multimedia project utilizing various technology components.

Standard 6.0 - Database Management Systems

The student will efficiently use database resources.

The student will:

6.1 Use productivity tools associated with database systems and/or functionalities to create, analyze, retrieve, and format data and content to meet objectives and solve problems.

Sample Performance Task

Integrated Project: Design a database for the personnel department for all employees' personnel data. Design and create this database based on information normally collected in a personnel office. Develop a minimum of three related tables. Utilize the information obtained and create three queries, three typical sorts, and three possible reports to utilize all the functions of the relational database.

Standard 7.0*

The student will individually advance toward expert level in the technological area of choice. (*Students must choose two areas of specialization and achieve industry certification.)

The student will:

- 7.1 Complete industry certification tests in at least two or more software applications.
- 7.2 Discuss the need for life-long learning and retraining as a result of technological changes in the work environment.
- 7.3 Demonstrate knowledge of articulation opportunities in post-secondary training.



Sample Performance Task:

Develop a portfolio that demonstrates attainment of important knowledge and skills to showcase professional growth and achievements in Information Systems Management (resume, samples of student's work, certificates, leadership activities, and evaluations).

